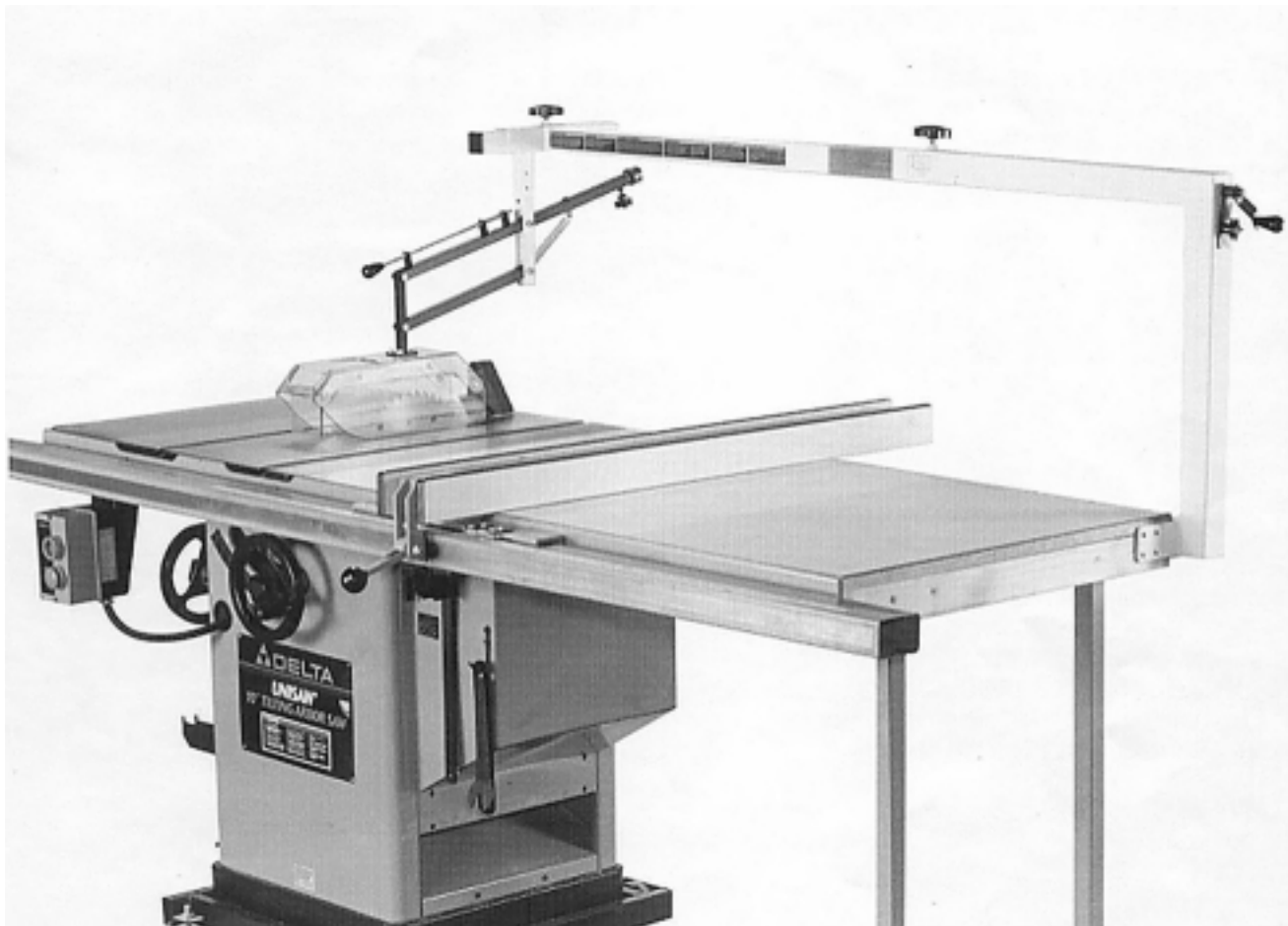


**BIESEMEYER**

# T-SQUARE® 10" OVERARM BLADE GUARD SYSTEM

Model 78-955 for 28", 30" and 40" T-Square® Fence Systems  
Model 78-960 for 50" and 52" T-Square® Fence System



DATED 02-15-01

PART NO. 1349820

**DELTA**  
MACHINERY

INSTRUCTION MANUAL

# INTRODUCTION

The Biesemeyer T-Square® Blade Guard System is designed for use on most table saws. The table mount is designed for use on saws equipped with the Biesemeyer® T-Square® Saw Fence system. The 78-955 and 78-960 are designed for use **ONLY** on Delta 10" Unisaws, 10" Tilting Arbor Saws and 10" Contractors Saws equipped with the Biesemeyer® 30" or 50" capacity T-Square® fence system respectively.

**OSHA** regulations and **ANSI** standards require that a splitter and anti-kickback device be utilized for through cutting operations. The 78-955 and 78-960 comply with these regulations.

## SAFETY RULES

**1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE BLADE GUARD SYSTEM.** Learn its application and limitations as well as the specific hazards peculiar to it.

**2. ALWAYS WEAR EYE PROTECTION.**

**3. ALWAYS WEAR SAFETY GLASSES** that comply with ANSI 287.1. Everyday glasses only have impact resistant lense; they are not safety glasses. Also use face shield or dust mask if cutting operation is dusty.

**4. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents

**5. KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept at a safe distance from the work area.

**6. USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risks of injury to person.

**7. TO PREVENT** injury from kickback or blade contact, use blade guard and splitter whenever the cutting operation permits.

**8. ALWAYS** use a push stick when cutting narrow stock.

**9. ALWAYS** stay alert and keep hands out of path of saw blade.

**10. DRUGS, ALCOHOL, MEDICATION. DO NOT** operate blade guard while under the influence of drugs, alcohol, or any medication.

**11. WARNING:** The dust generated by certain woods and wood products can be injurious to your health. **ALWAYS** operate machinery in a well ventilated area and provide for proper dust removal. Use wood dust collection systems whenever possible.

**12. ALWAYS** use blade guard, splitter and anti-kickback fingers for every operation for which it can be used, including all thru-sawing. Thru-sawing operations are those when the blade cuts completely through the workpiece as in ripping or cross-cutting.

**13. AVOID** awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool.

**14. AVOID KICKBACKS** (work thrown back towards you) by:

- A. Keeping blade sharp
- B. Keeping rip fence parallel to saw blade
- C. Keeping splitter and anti-kickback fingers and guard in place and operating.
- D. Not releasing the work before it is pushed all the way past the saw blade.
- E. Not ripping work that is twisted, warped or does not have a straight edge to guide along the fence.

**15. PROVIDE** adequate support to the rear and sides of the saw table for wide or long workpieces.

**16. NEVER** attempt to free a stalled saw blade without first turning the saw **"OFF."**

**17. ALWAYS STOP** the saw blade before removing scrap pieces.

**18. NEVER** perform layout, assembly or set-up work on the table while the saw is running.

**19. DISCONNECT** saw from power source before changing blades or servicing.

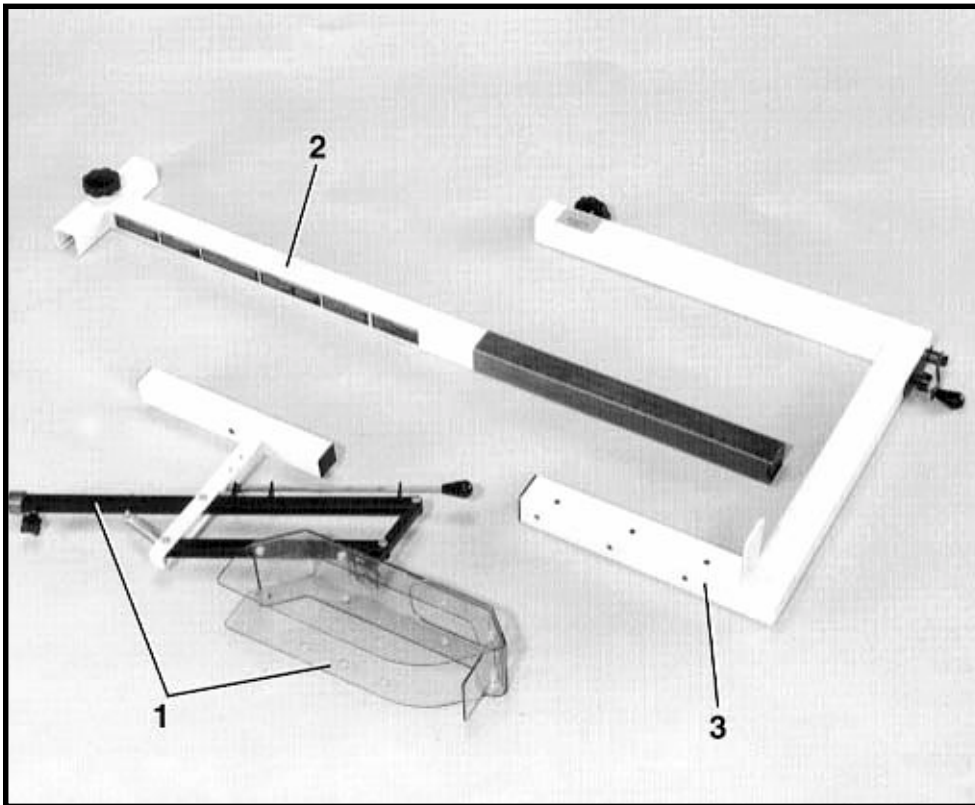
**20. NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.

**21. SHOULD** any part of your blade guard be missing, damaged, or fail in any way, replace missing, damaged or failed parts before resuming operation.

**22. SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others.

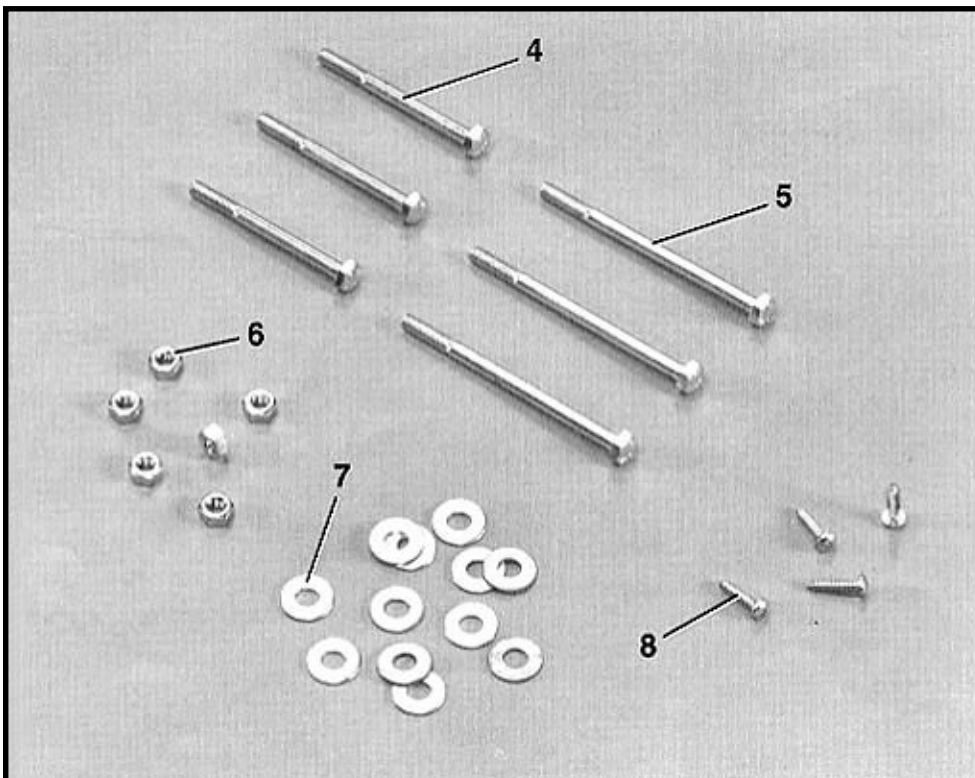
# UNPACKING

Carefully unpack the blade guard and all loose items from the carton. Figures 2, 3, and 4 illustrate all items with the Blade Guard System.



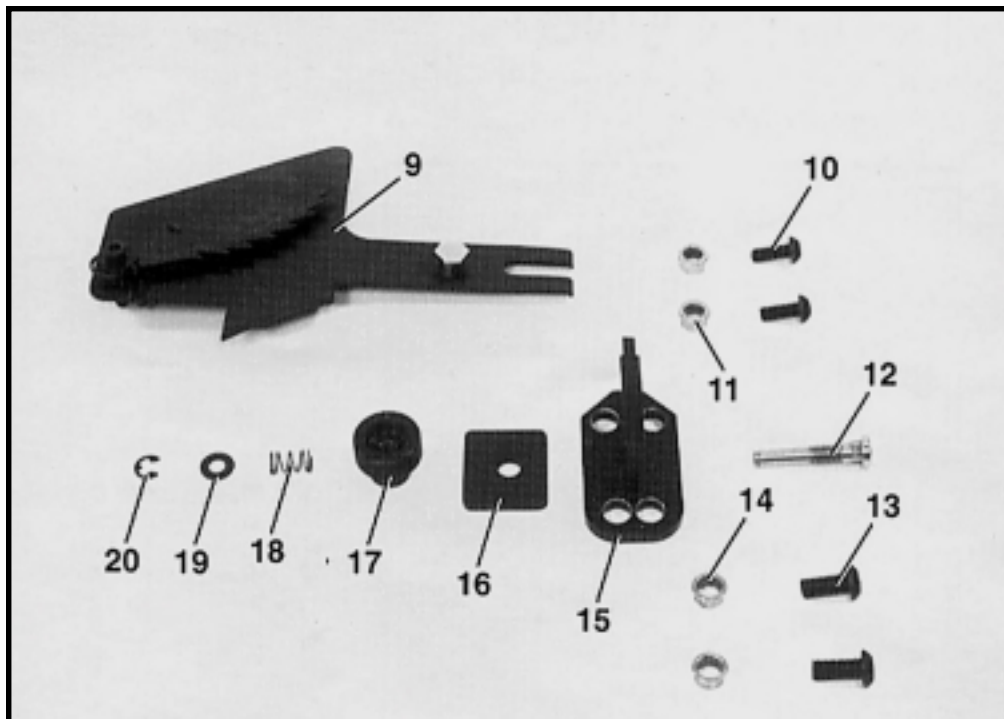
- 1 - Blade Guard Basket Assembly
- 2 - T-Arm
- 3 - Guard Mounting Arm

Fig. 2



- 4 - 1/4-20 x 2-3/4" long hex head screws (3)
- 5 - 1/4-20 x 3-3/4" long hex head screws (3)
- 6 - 1/4-20 hex nuts (6)
- 7 - 1/4" flat washers (12)
- 8 - #8 x 3/4" pan head screws (4)

Fig. 3



- 9 - Splitter
- 10 - 1/4-20 x 5/8" button head screws (2)
- 11 - 1/4" bushing (2)
- 12 - Stud
- 13 - 5/16-18 x 5/8" button screws (2)
- 14 - 5/16" bushings (2)
- 15 - Splitter mounting bracket
- 16 - Plate
- 17 - Knob
- 18 - Spring
- 19 - 1/4" flat washer
- 20 - E-ring

Fig. 4

## INSTALLATION

1. Clamp the guard mounting bracket (A) Fig. 5 to the back rail (B) of the fence system, making sure the metal tab (C) is flush up against the table frame as shown.

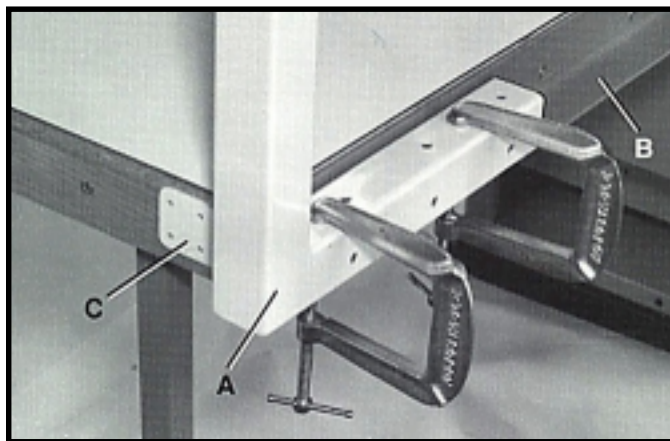


Fig. 5

2. Mark the location of the six holes, three each to be drilled into the vertical and horizontal portion of the back rail (B) Fig. 6, using the holes (D) and (E) in the mounting bracket as a template.

3. Remove the mounting bracket (A) Fig. 6, from the back rail (B) and drill six holes in the back rail using a 9/32" drill bit.

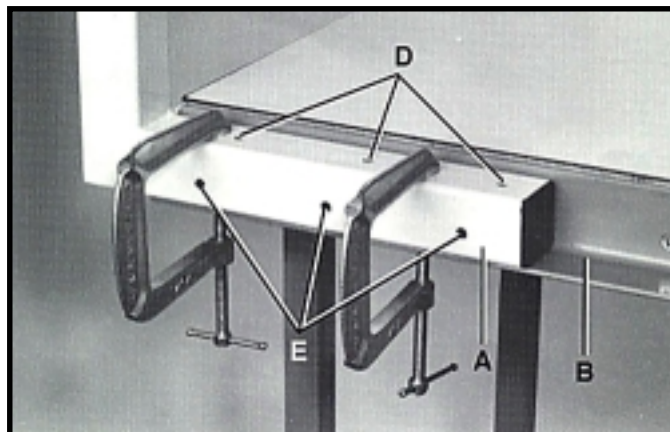


Fig. 6

4. Fasten the mounting bracket (A) Fig. 7, to the back rail (B) using the three 2-3/4" long hex head screws (F); three 3-3/4" long hex head screws (G); twelve 1/4" flat washers; and six 1/4-20 hex nuts.

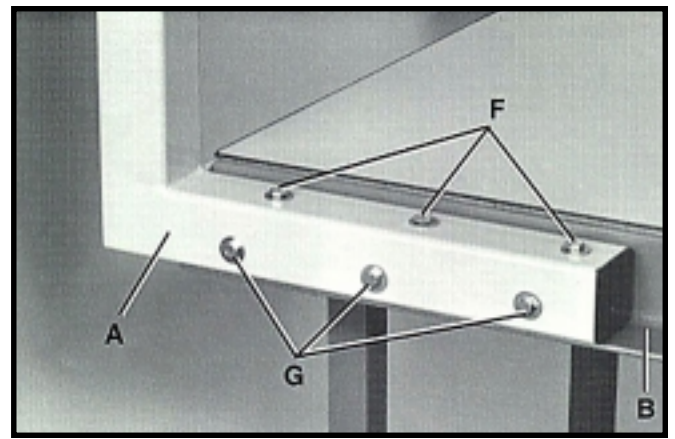


Fig. 7

5. Fasten the metal tab (C) Fig. 8, to the table frame using the four 3/4" long pan head screws (J).

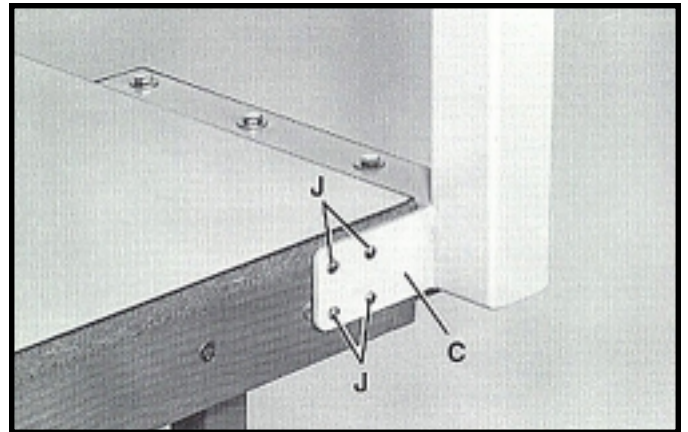


Fig. 8

6. Align adjusting arm (K) Fig. 9, with mounting bracket (L) making sure threaded rod (M) is threaded into nut (N) of adjusting arm (K).

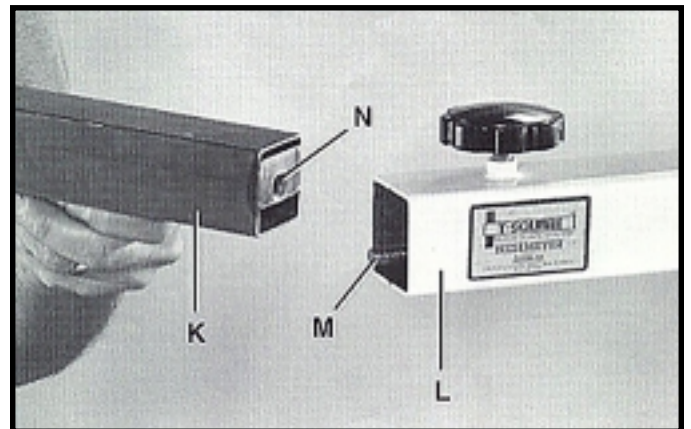


Fig. 9

7. Turn adjusting crank handle (O) Fig. 10, clockwise to draw adjusting arm (K) into mounting bracket (L). Turn crank handle (O) until end of arm (P) is approximately centered over the saw blade and lightly tighten lockknob (Q).

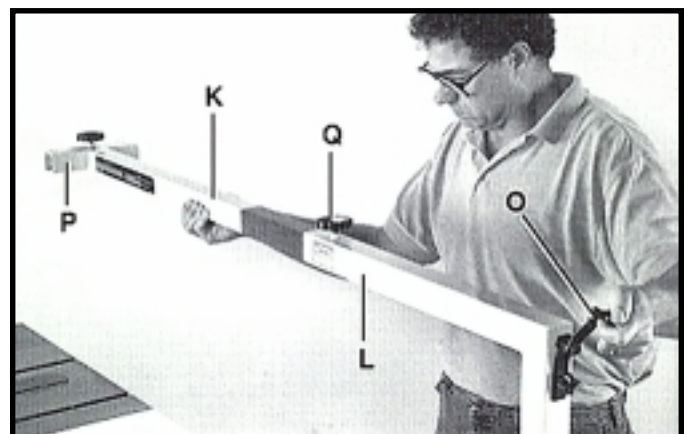


Fig. 10

8. Locate the components shown in Fig. 11, for the splitter assembly.

- A. Splitter
- B. 1/4-20 x 5/8" button head screws (2)
- C. 1/4" Bushings (2)
- D. Stud
- E. 5/16-18 x 5/8" button head screws (2)
- F. 5/16" Bushings (2)
- G. Splitter mounting bracket
- H. Plate
- J. Knob
- K. Spring
- L. 1/4" Flat washer
- M. E-ring

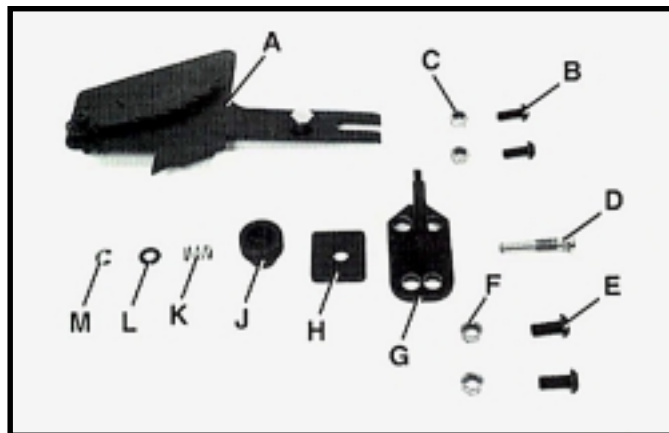


Fig. 11

**9. IMPORTANT: The following instructions for assembling the splitter illustrated in this manual are shown on a Delta 10" right-tilting arbor Unisaw. Assembly to a left-tilting arbor saw will be opposite to what is shown except where noted.**

10. Insert and seat stud (D) Fig. 12 through hole in side of splitter mounting bracket (G). NOTE: It will be necessary to have a hammer, punch and a tool with a recessed hole similar to a deep well socket in order to seat stud (D) Fig. 12, and used as shown in Fig. 13.

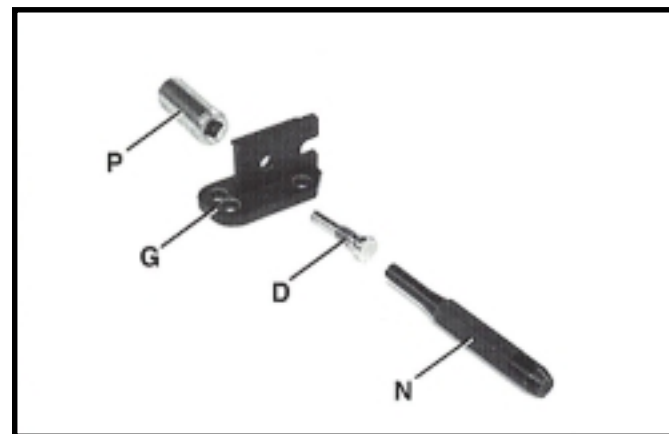


Fig. 12

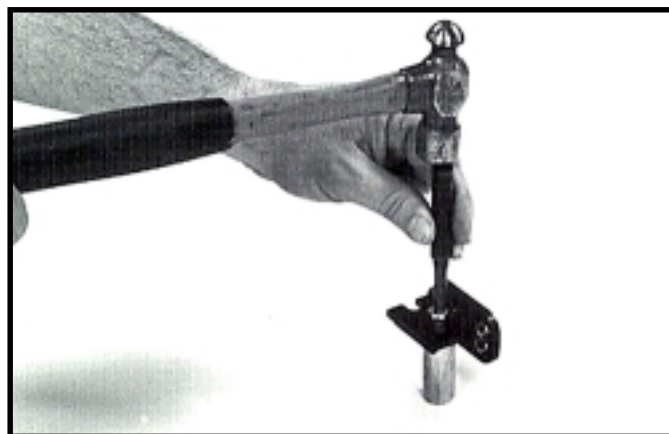


Fig. 13

13. Fig. 14 illustrates stud (D) assembled to splitter mounting bracket for both the left and right-tilting arbor saw.

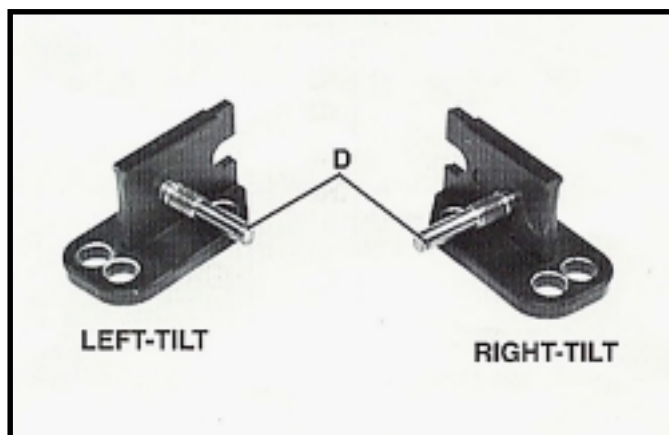


Fig. 14

12. Loosely assemble plate (H) Fig. 15, knob (J), spring (K), flat washer (L) and E-ring (M) onto stud (D) as shown assembled in Fig. 16.

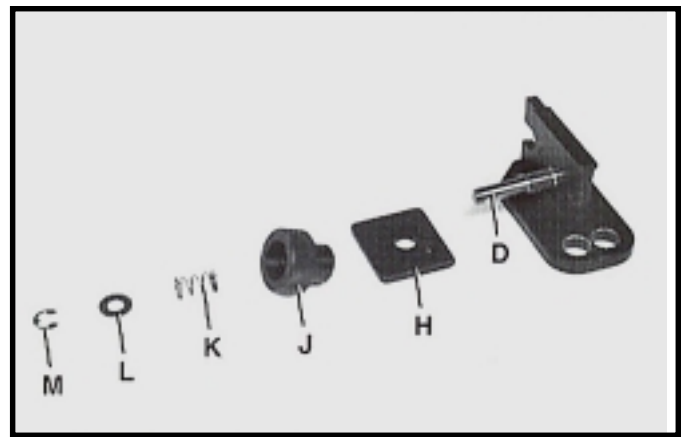


Fig. 15



Fig. 16

13. Locate two bushings each, (C) and (F) Fig. 17, two 1/4-20 x 5/8" button head screws (B); two 5/16-18 x 5/8" button head screws (E) and splitter mounting bracket assembly (G). **NOTE: Bushings (C) with smaller I.D. hole and two 1/4 x 5/8" long screws (B) are used when mounting the splitter to the Delta 10" tilting arbor saw and the 10" contractors saw. Bushings (F) Fig. 17, with the larger I.D. holes and two 5/16-18 x 5/8" long button head screws (E) are used when mounting the splitter bracket to a 10" Unisaw.**

14. Depending on what saw you are using, insert two bushings (F) Fig. 17, into holes (R) in the splitter mounting bracket.

15. Remove the saw blade from the saw arbor.

16. Assemble the splitter mounting bracket (G) Fig. 18, to the inside of rear trunion using two button head screws (E) Figs. 17 and 18, since we are mounting the splitter to a 10" Right tilting Arbor Unisaw. **NOTE: Just snug up button head screws at this time.**

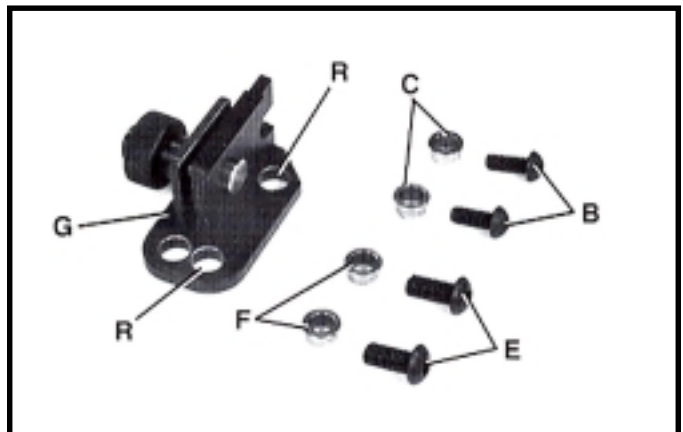


Fig. 17

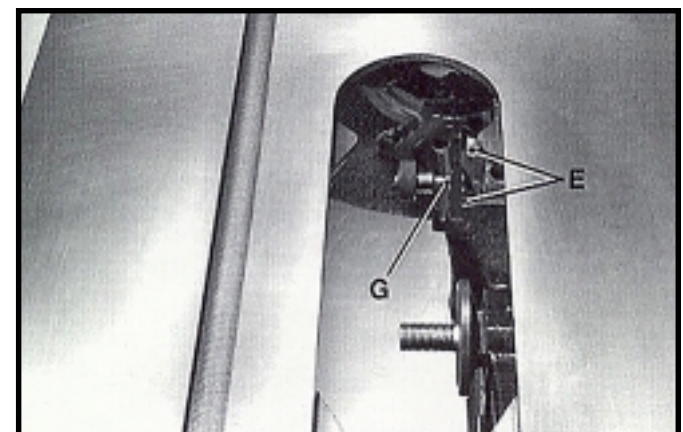


Fig. 18

17. Using a straight edge (S) Fig. 19, align the top portion of splitter mounting bracket (G) to saw arbor (T) as shown. Then tighten two screws (E) Fig. 18.

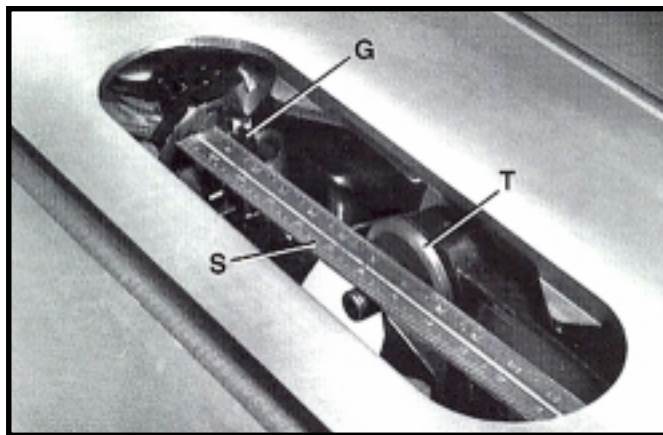


Fig. 19

18. Insert index pin (X) Fig. 20, through the hole in splitter (W), as shown and fasten with locknut (Y). Fig 20 illustrates the index pin assembly arrangement for both right and left-tilting arbor saws.

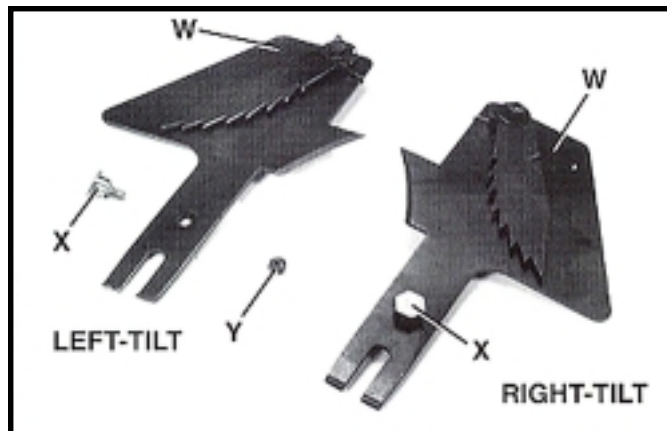


Fig. 20

19. Loosen knob (J) Fig. 21, and slide splitter (W) down as far as possible into the splitter mounting bracket and tighten knob (J). Fig 22 illustrates the splitter assembled to the mounting bracket. **IMPORTANT:** When performing non thru-cutting operations, such as dadoing, the splitter (W) Figs. 21 and 22, can be removed by loosening knob (J). This enables you to use the guard basket for non thru-cutting operations.

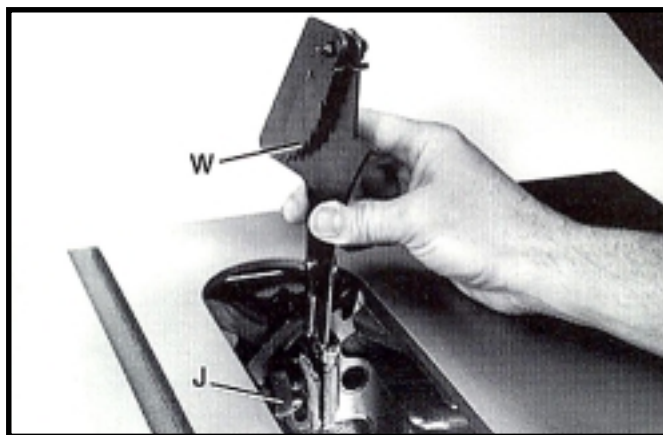


Fig. 21

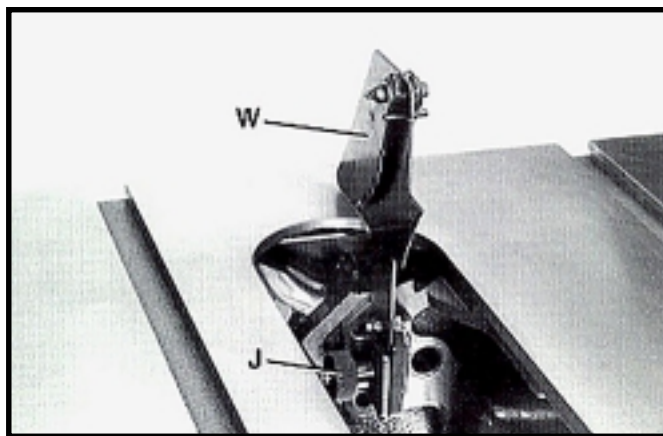


Fig. 22

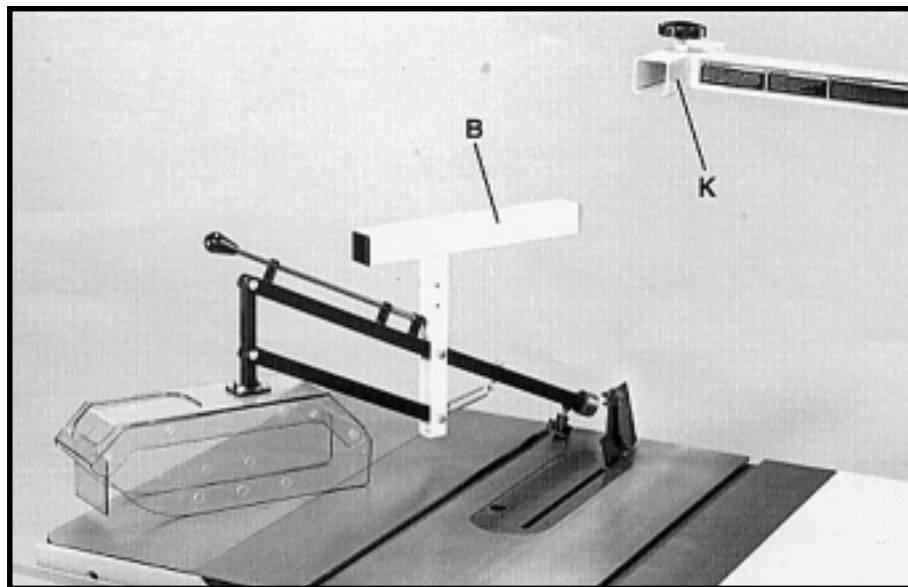


Fig.23

20. Insert mounting bracket (B) Fig. 23. of the blade guard basket assembly into the "T" of the adjusting arm (K).

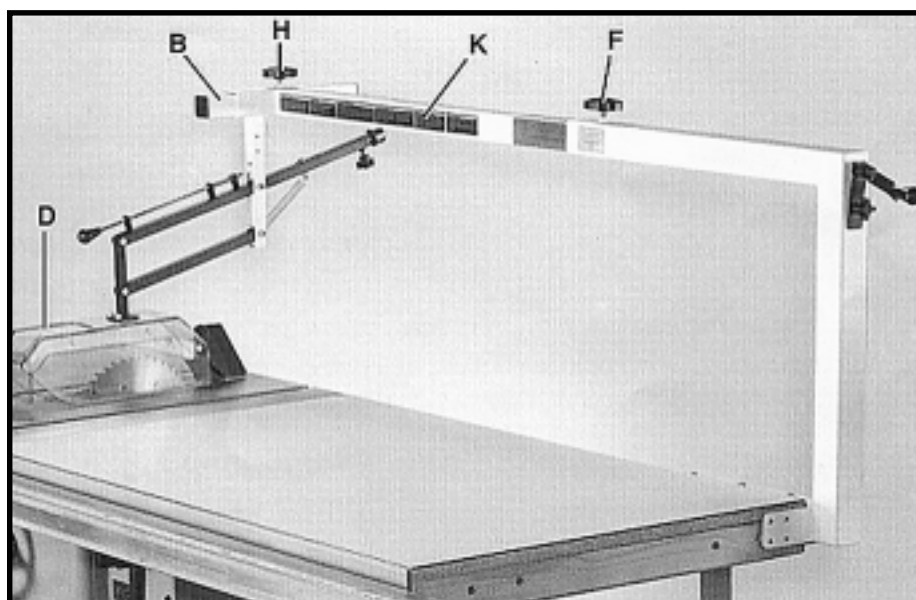


Fig. 24

21. Loosen the two locking knobs (F) and (H) Fig. 24, and adjust the two arms (B) and (K) until the guard basket (D) is centered over the saw blade. **IMPORTANT: Make certain the rear end of the guard basket frame (E) Fig. 25, is 3/8" away from the front of the splitter (A) and tighten the two locking knobs (F) and (H) Fig. 24.**

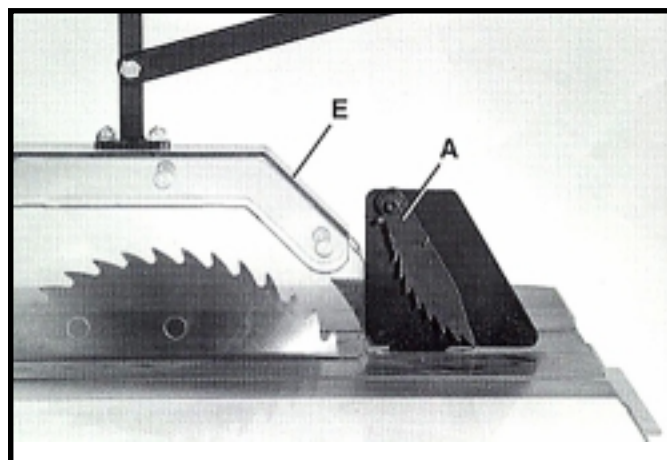


Fig. 25

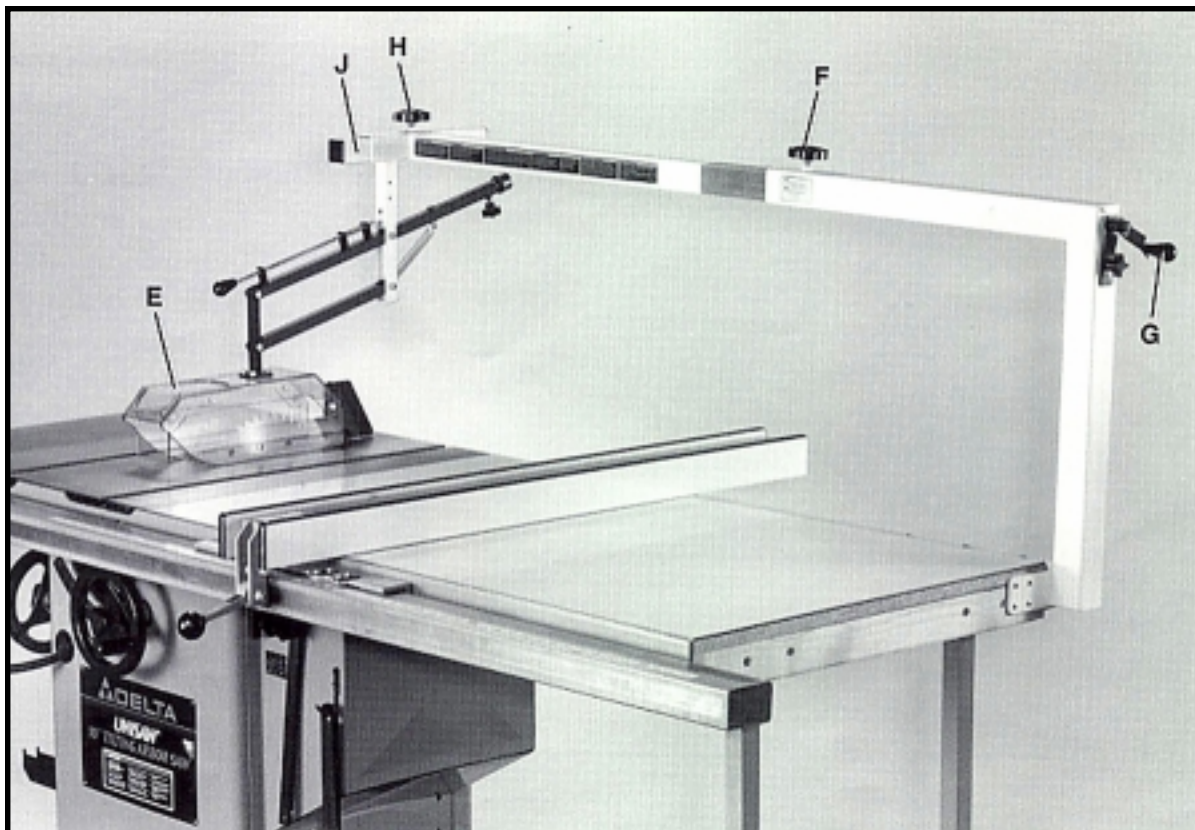


Fig. 26

22. Left to right movement of the blade guard basket (E) Fig 26, is obtained by loosening locking knob (F) and turning adjusting lever (G) clockwise to move the blade guard basket (E) to the right and counter clockwise to move it to the left. Always tighten the knob (F) after adjustment is completed.

26. Front to back movement of the blade guard basket (E) Fig. 26, is obtained by loosening locking knob (H) and sliding mounting arm (J) in or out as desired. Always tighten locking knob (H) after adjustment is complete

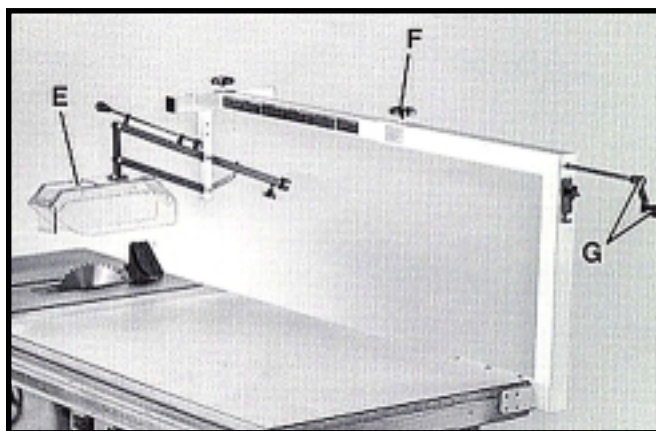


Fig. 27

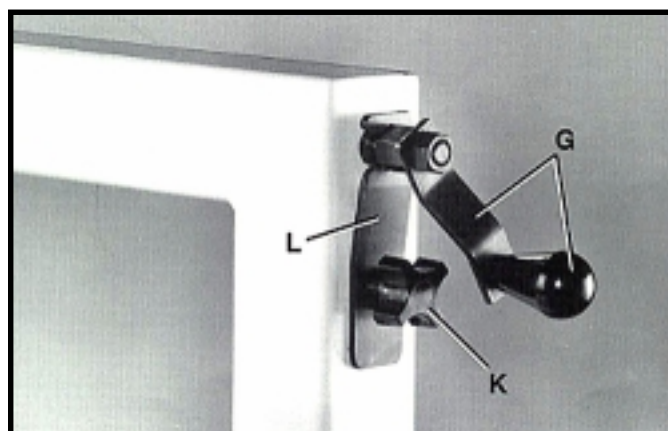


Fig. 28

24. For rapid movement of the blade guard basket (E) Fig. 27, to the right, Raise basket assembly (E) as shown, and loosen locking knob (F) Fig. 27, and (K) Fig. 28. Then flip lock lever (L) Fig 28, to the rear and pull adjusting lever (G) Fig. 27, out from the overarm as shown. After replacing the blade guard basket (E) Fig. 27, over the saw blade, make sure lock lever (L) Fig. 28, is in the locked position as shown, and the two locking knobs (F) Fig 27 and (K) Fig. 28, are tightened.

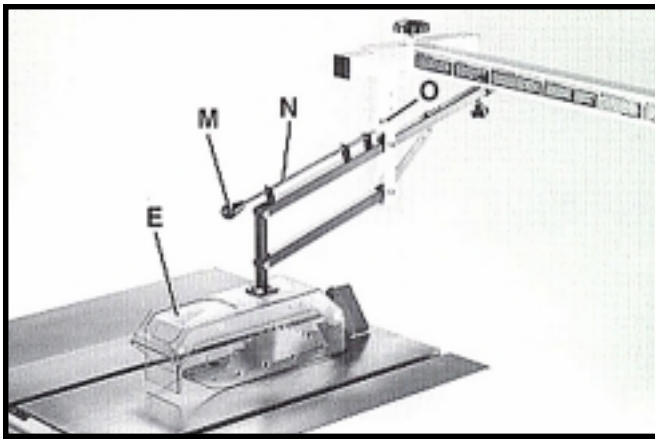


Fig. 29

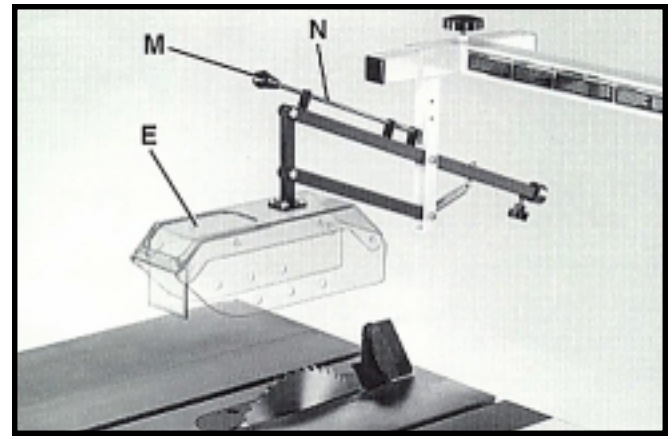


Fig. 30

25. To raise the guard basket (E) Fig. 29, above the saw blade, simply lift up knob (M) until pin (N) engages with hole (O) on vertical mounting arm. Fig. 30 illustrates the blade guard basket (E) in the raised position. To return the blade guard basket (E) over the saw blade, pull out knob (M). The blade guard basket (E) will then return downward over the saw blade.

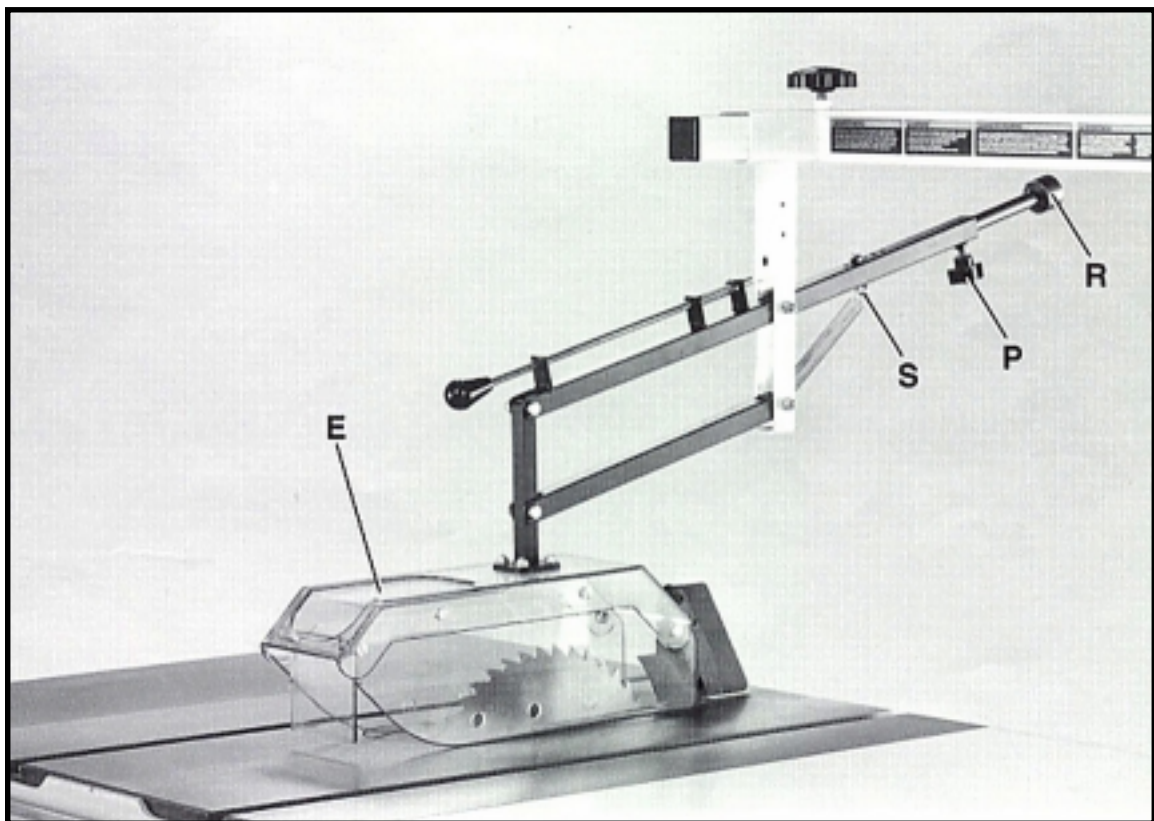


Fig. 31

26. A counter balancing weight is provided to achieve the desired weight of the guard basket (E) Fig. 31, on the workpiece. To adjust the counter balance weight, loosen knob (P) and pull weight extension (R) out a desired distance as shown. Then tighten knob (P). If additional adjustment is required, spring position may be changed by moving I-bolt (S).

**Available as an accessory, Model No. 78-966 Accessory Vacuum Attachment for Biesemeyer Blade Guard Systems will provide an effective method of collecting dust directly above the blade without affecting the view of the blade.**



## PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of factory service centers and authorized service stations listed in your owner's manual.

To obtain additional information regarding your Delta quality product or to obtain parts, service or warranty assistance, please call Delta's toll-free "hotline" number.

Delta maintains a modern, efficient Parts Distribution Center, located in Jackson, Tennessee.

Highly qualified and experienced Customer Service Representatives are standing by to assist you on weekdays from 7:00 A.M. to 6:00 P.M. Nashville time.



**4825 Highway 45 N  
Jackson, TN 38302  
Phone: (901) 668-8600**

***HOTLINE***

**800-223-7278**



## Two Year Limited Warranty

Delta will replace, at its expense and at its option, any Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer notifies his supplying distributor of the alleged defect within two years from the date of delivery to him, of the product and provides Delta Machinery with reasonable opportunity to verify the defect by inspection. Delta Machinery may require that electrical motors be returned prepaid to the supplying distributor or authorized service center for inspection and repair or replacement. Delta Machinery will not be responsible for asserted defect which has resulted from misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta machinery be liable for incidental or consequential damages resulting from defective products. This warranty is Delta Machinery's sole warranty and sets forth the customers exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.